You've Got a Friend in Me: Fostering Social Connection Among College Students Through Peer-Led Physical Activity

Jessica B. Kirby, PhD¹ Megan Babkes Stellino, PhD² Cynthia Lewis, MSc¹ Kimberly Humphrey, MSc¹ Katie Gordon, MAEd¹ Keston G. Lindsay, PhD¹

Social connection and physical activity (PA) are essential health behaviors necessary for young adults to thrive. The majority of college students in the United States are not meeting PA recommendations and simultaneously report concerning rates of loneliness, depression, anxiety, and fatigue; all factors that contribute to poor psychological well-being and reduce students' abilities to sustain academic success. These mental and physical health indicators have only worsened due to the stress, isolation, and uncertainty experienced during the COVID-19 pandemic. Fitness Buddies (FB) is a free peer-led PA program designed to combat loneliness, stress, anxiety, depression, and low PA, by providing students the opportunity to connect with one another through PA. FB participants are matched with a peer leader for weekly PA sessions based on activity interests and schedules. The FB program model shifts the focus of traditional PA programs, from prescribing and monitoring PA duration, intensity and modalities, to supporting psychological well-being through satisfaction of the three basic psychological needs of competence, autonomy, and relatedness within peer PA-based relationships. In the first pilot phase of implementation, students reported improved situational affect, to include reduced stress and anxiety, following participation in the FB program for one academic semester. Participants also reported the development of quality peer relationships

Health Promotion Practice November 2022 Vol. 23, No. (6) 907–911 DOI: 10.1177/15248399211072535 Article reuse guidelines: sagepub.com/journals-permissions © 2022 Society for Public Health Education and a sense of belonging to the campus community, both of which had previously been lacking. The FB program model is an innovative and cost-efficient strategy to supporting college students' psychological well-being and long-term success.

Keywords: college students; health promotion; mental health; physical activity; social connection; psychological well-being

BETTER TOGETHER: THE NEED FOR SOCIAL CONNECTION AND PHYSICAL ACTIVITY

Social connection (O'Connor et al., 2011) and physical activity (PA; Piercy, et al., 2018) are essential for psychological well-being. Social cognitive neuroscientist Matthew Lieberman (TEDx Talks, 2013) calls the innate drive of humans to be socially connected humanity's "greatest superpower." Additionally, the more consistently we move our bodies each day, the better and often happier we feel (Zhang & Chen, 2019). Prevalence of

¹University of Colorado Colorado Springs, Colorado Springs, CO, USA ²University of Northern Colorado, Greeley, CO, USA

Authors' Note: Address correspondence to Jessica B. Kirby, Assistant Professor of Health Sciences, University of Colorado Colorado Springs, Colorado Springs, CO 80918, USA: email: jkirby@uccs.edu.

mental health challenges among college students in the United States is increasing, and the majority (54.4%) are not meeting PA recommendations (American College Health Association [ACHA], 2019). Although most students (81.8%) surveyed in 2019 reported their heath as "good," "very good," or "excellent," the data beyond overall health were concerning (ACHA, 2019). A majority of students reported in the past 12 months they had felt "hopeless" (55.9%), "overwhelmed" (87.4%), "exhausted" (84.7%), "very sad" (70.8%), "overwhelming anxiety" (65.7%), and "very lonely" (65.6%), while 45.1% reported feeling "so depressed it was difficult to function" (ACHA, 2019). These mental health indicators have worsened during the COVID-19 pandemic. The 2020 Healthy Minds report (Eisenberg et al., 2021) revealed increased national rates of depression and anxiety among college students, with a staggering 83% of students surveyed reporting that mental health challenges were negatively impacting their academic performance, and nearly two thirds reporting they felt lonely and isolated. Collectively, these data exemplify the critical need for programming that supports students' psychological well-being by providing opportunities for social connection and PA. Institutions of higher education are uniquely positioned to develop campus programs and policies, and foster campus cultures, that support students in establishing healthy relationships and healthy behaviors (Plotnikoff et al., 2015).

THE FITNESS BUDDIES (FB) PROGRAM MODEL

FB is a peer-led PA program developed at the University of Colorado Colorado Springs to combat loneliness, stress, anxiety, depression, and low PA. FB was developed by an interdisciplinary team of stakeholders consisting of students, faculty, and staff from the Student Health Services, Campus Recreation, and academic Health Sciences departments. The program was theoretically framed using Relationship Motivation Theory (RMT; Deci & Ryan, 2014). RMT posits that quality relationships are experienced when the basic psychological needs of autonomy, competence, and relatedness are satisfied through those relationships. FB was developed for students who were not using the campus recreation center due to feeling intimidated by perceived social evaluation, lacking a peer to workout with, and/or having low perceived competence to engage in PA alone. The aim of FB was to shift the focus from prescribing and tracking PA frequency, duration, and intensity, to supporting psychological well-being through PA-based peer relationships.

Peer leaders (PLs) were students who were interviewed and selected from Health Science and Exercise Science degree programs. The role of the PLs was developed using the RMT framework. The absence of a prescribed program from a personal trainer supported the participants' autonomy to choose workouts they were comfortable with. The reliability of a supportive workout "buddy" allowed participants to develop physical and social competence, and a sense of relatedness with the PLs. Onboarding for PLs emphasized the scope of the PL's role: to serve as a workout buddy and offer support, encouragement, and accountability. Onboarding also emphasized that PLs do not act as a personal trainer. PLs were taught how to refer participants to services for nutrition and mental health concerns, and how to support participants with diverse life experiences and fitness levels. Facilitators also discussed how to support participants across the spectrum of physical and cognitive ability. PL training was essential to train the "soft skills" of professionalism, communication, motivation, and accountability and to ensure that PLs were not formally training their respective buddies.

FB participants engaged in 1-hour PA sessions with a PL, 1 to 2 times per week. Sessions were either one-onone or in small groups of up to five peers. Students were matched with a PL based on compatible schedules and common activity interests. PLs and participants communicated with each other before their scheduled session and mutually agreed to participate together in activities such as walking, running, hiking, swimming, yoga, intramural sports, group fitness classes, weightlifting, or rock climbing. PLs worked with participants during times of transition (e.g., semester transitions) to ensure participants who wanted to continue in FB remained matched with a PL. The University of Northern Colorado Institutional Review Board approved the study.

► THE IMPACT OF SOCIALLY CONNECTED PA

We evaluated participant (N = 15) responses from 155 sessions across 16 weeks. Many of the participants (59%) registered for FB because they did not have anyone to exercise with. At each session, participants and PLs completed a check-in/check-out form that solicited self-report about how they felt upon arrival to the session and how they felt immediately following the session. Check-in/check-out response choices included emojis with the corresponding feeling words of happy, sad, frustrated, meh, stressed, excited, anxious, tired, connected, energized, confident, and relaxed. Descriptively, emoji data showed that sessions had a positive impact

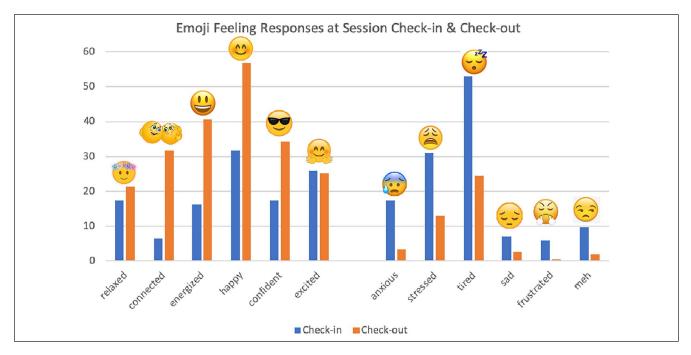


FIGURE 1 Percentage of Sessions for Each Emoji Feeling Response at Check-In and Check-Out

on participants' situational affect. Importantly, when participants checked in to a session feeling anxious, 81.5% of the time they checked out not feeling anxious, and when participants checked in to a session feeling stressed, 58.3% of the time they checked out not feeling stressed. Figure 1 graphically displays these changes in situational affect at check-in (blue bars) and check-out (orange bars), with positive affect grouped on the left side and negative affect grouped on the right side.

Participants described developing social and physical competence through their FB experience, improved ability to manage daily stressors, and increased capacity to focus while studying. Strikingly, many participants, including senior-level students, reported their PL was their first experience of a quality peer relationship on campus. Prior to participation in FB, these participants reported they did not feel a sense of belonging on campus. Table 1 presents participant comments that exemplify this improved well-being via PA-based peer relationships. This experiential feedback informed and supported our decision to secure grant funding to continue this valuable line of applied research.

THE FUTURE OF FB

FB is a cost-efficient program to support the strategic goals of improved student well-being on college campuses. Participants reported feeling better after each session and developed quality peer relationships they were previously lacking. Using emojis with associated feeling words for quick report of situational affect was an innovative measurement tool for evaluation of this program.

The next phase of implementation and evaluation will be facilitated by grant funding from the NIRSA Foundation with expanded measures to further evaluate the effectiveness and impact of this program. We will measure the impact of PA-based peer relationships on psychological well-being, motivation, and basic psychological needs satisfaction. In addition, in the next iteration participants will also be given a Fitbit to wear, to measure overall PA behavior. This additional evidence will contribute to a better understanding of the dynamics, challenges, and benefits of PA-based peer relationships for improved psychological well-being among college students.

Increased understanding of the FB model will support our collaboration with other campuses regionally and nationally, as we seek to disseminate this model to benefit college students more broadly. In addition to continuing to evaluate the FB model and implementing the model on other campuses, our team is developing plans to pilot the FB model with other community populations experiencing isolation, loneliness, and challenges with psychological well-being. Potential populations for future implementation and evaluation of this model

| Themes of Participants' Experiences | Representative Comments |
|--|--|
| Perceived loneliness on campus | "I don't really have a lot of other friends on campus. Before Fitness Buddies, I didn't know a single person." "I don't really talk to many people on campus, honestly. I don't really strike up a conversation with some random person I see at the library. It can be awkward to meet someone new." |
| Valued, quality peer relationship on campus | "Fitness Buddies has given me an opportunity to meet people that I never would have. Each fitness buddy brings something a little different to the table. It has been great getting to know people from different areas of study and building that whole network." "A fitness buddy is really like a friendship. It's really a workout with a friend. I feel like we have a friendship now, so it's been really nice!" |
| Feeling significantly better | "I feel so much better! No matter how I'm feeling before, we're always laughing towards the end." "If I get up and move a little bit, I definitely have energy throughout the day. I'm in a better mood. I usually have a much better day. My overall health is improving." |
| Improved competence | "Working out together, we're kind of like, going through this challenge. But it's not like a [academic] test kind of challenge. It's sort of like try- ing to overcome this physical challenge. We both worked on some stuff that was kind of uncomfortable for us. But realized that we could get through it. So, it helped with my self confidence in other areas too." "I'm feeling more confident overall, in myself and my abilities." |
| Increased focus while studying | "I'm better at doing homework after exercising?! I didn't really think that would happen. But I'm focused right after exercise. Was not expecting that, but that is definitely a plus!" "My grades have gone up too. I haven't had such a hard time studying for tests. It's definitely been helpful for me to manage the load better." |
| Better management of daily stressors | "I'll come in and be really stressed out and just exhausted from class and from everything else that is going on. It's an escape from the everyday stresses of life in a healthy manner. Then after I'm done working out I'm usually feel pretty good about myself." "I'm less anxious. I really think that it really relieves your anxiety. My mental health is a lot better overall." |

 TABLE 1

 Participant Comments Regarding the Impacts of Fitness Buddies Program Participation

include partnership with veterans organizations, as well as with cohorts of community members with chronic conditions who would benefit from continued healthy behaviors in a supportive environment after completing outpatient rehabilitation.

IMPLICATIONS FOR RESEARCH AND PRACTICE

FB is a valuable program model with the potential to substantially improve college students' psychological well-being. Programs like FB are needed to address the "mental health crisis" among young adults in the United States (Xiao et al., 2017), now more than ever. This dire state of mental health was substantially exacerbated and complicated by the isolation, stress, instability, and uncertainty experienced during the COVID-19 pandemic (Hawley et al., 2021). College students' need for social connection with peers cannot be understated. Even before students had experienced the isolation and social anxiety of the COVID-19 pandemic, participants attested to attending classes on campus for several years, and not making any quality peer connections. This remains the most significant realization about the power and necessity of peer-led PA programs like FB. It is with amplified urgency that we recommend that researchers and practitioners across higher education prioritize programs like FB that leverage the simple, yet valuable, health boosting potential of peer connection and PA to support the psychological well-being of students on campuses across the country. Students enter college classrooms today with more mental health concerns than ever before (Hawley et al., 2021). Higher education professionals should leverage the resources and expertise at their disposal to support students in healing, so that future cohorts of students might experience less struggle and more opportunities to thrive.

ORCID iDs

Jessica B. Kirby 🕩 https://orcid.org/0000-0003-0063-6546 Keston G. Lindsay 🝺 https://orcid.org/0000-0002-2039-7477

REFERENCES

American College Health Association. (2019). American College Health Association-National College Health Assessment II: Reference group executive summary spring 2019. https://www. acha.org/documents/ncha/NCHA-II_SPRING_2019_US_ REFERENCE_GROUP_EXECUTIVE_SUMMARY.pdf

Deci, E. L., & Ryan, R. M. (2014). Autonomy and need satisfaction in close relationships: Relationships motivation theory. In N. Weinstein (Ed.), *Human motivation and interpersonal relationships* (pp. 53–73). Springer.

Eisenberg, D., Lipson, S. K., Heinze, J., Zhou, S., Talaski, A., & Patterson, A. (2021). Healthy Minds Study: Fall 2020 Data Report. https://healthymindsnetwork.org/wp-content/uploads/2021/02/ HMS-Fall-2020-National-Data-Report.pdf Hawley, S. R., Thrivikraman, J. K., Noveck, N., Romain, T. S., Ludy, M. J., Barnhart, L., Siew Swee Chee, W., Jung Cho, M., Hueh Zan Chong, M., Du, C., Fenton, J. I., Ying Hsiao, P., Hsiao, R., Keaver, L., Lee, H., Shen, W., Lai, C.-C., Tsent, K.-W., Tseng, W.-C., & Tucker, R. M. (2021). Concerns of college students during the COVID-19 pandemic: Thematic perspectives from the United States, Asia, and Europe. *Journal of Applied Learning and Teaching*, 4(1), 11–20.

O'Connor, M., O'Connor, M., Sanson, A., Sanson, A., Hawkins, M. T., Hawkins, M. T., . . . Olsson, C. A. (2011). Predictors of positive development in emerging adulthood. *Journal of Youth and Adolescence*, *40*(7), 860–874. https://doi.org/10.1007/s10964-010-9593-7

Piercy, K. L., Troiano, R. P., Ballard, R. M., Carlson, S. A., Fulton, J. E., Galuska, D. A., . . . Olson, R. D. (2018). The physical activity guidelines for Americans. *Journal of the American Medical Association*, *320*(19), 2020–2028. https://doi.org/10.1001/jama.2018.14854

Plotnikoff, R. C., Costigan, S. A., Williams, R. L., Hutchesson, M. J., Kennedy, S. G., Robards, S. L., . . . Germov, J. (2015). Effectiveness of interventions targeting physical activity, nutrition and healthy weight for university and college students: A systematic review and meta-analysis. *International Journal of Behavioral Nutrition and Physical Activity*, *12*(1), 1–10. https://doi.org/10.1186/s12966-015-0203-7

TEDx Talks. (2013, October 7). The social brain and its superpowers: Matthew Lieberman, PhD at TedxStLouis [Video]. *YouTube*. https://www.youtube.com/watch?v=NNhk3owF7RQ&ab_ channel=TEDxTalks

Xiao, H., Carney, D. M., Youn, S. J., Janis, R. A., Castonguay, L. G., Hayes, J. A., & Locke, B. D. (2017). Are we in crisis? National mental health and treatment trends in college counseling centers. *Psychological Services*, 14(4), 407–415. https://doi.org/10.1037/ ser0000130

Zhang, Z., & Chen, W. (2019). A systematic review of the relationship between physical activity and happiness. *Journal of Happiness Studies*, *20*(4), 1305–1322.